

IN THE CLAIMS:

1.-10. (Cancel)

11. (New) A rear projection type display apparatus comprising:

a transmission type screen;

a light source;

plural optical switch elements for modulating light from the light source;

and,

a projecting lens for projecting the light modulated by the optical switch elements onto the transmission type screen;

wherein the light modulated by the switching elements are polarized lights respectively; and,

wherein polarized states of the polarized lights are coincide with each other when projected onto the transmission type screen.

12. (New) A rear projection type display apparatus according to Claim 11, wherein the transmission type screen comprises:

a transparent base; and,

a micro-lens arrangement arranged on a face of the transparent base, onto which the polarized light is injected.

13. (New) A rear projection type display apparatus according to Claim 11, wherein the screen comprises a light absorbing layer having predetermined very small opening portions.

14. (New) A rear projection type display apparatus according to Claim 12, wherein ones of micro-lenses of the micro-lens arrangement have substantially a rod-like shape.

15. (New) A rear projection type display apparatus according to Claim 12, wherein ones of micro-lenses of the micro-lens arrangement have substantially a sphere-like shape.

16. (New) A rear projection type display apparatus according to Claim 11, wherein polarized states of the polarized lights are circular polarization when projected onto the transmission type screen.

17. (New) A rear projection type display apparatus according to Claim 11, wherein polarized states of the polarized lights are elliptic polarization when projected onto the transmission type screen.

18. (New) A rear projection type display apparatus according to Claim 11, wherein polarized states of the polarized lights are linear polarization when projected onto the transmission type screen.

19. (New) A rear projection type display apparatus according to Claim 11, wherein the transmission type screen comprises a light distribution control element having:

a transparent base;
a plurality of micro-lenses arranged in at least one direction of the transparent base, to effect a light focusing operation; and,
a light absorbing layer having small opening portions at a light converging part of the micro-lenses; and,
wherein the transparent base has a phase difference of 1/2 wave-length or smaller due to a difference in incident angle of light passing through the transparent base after passing through the micro-lens.

20. (New) A rear projection type display apparatus according to Claim 11, wherein the transmission type screen comprises a light distribution control element having:

a transparent base;
a plurality of micro-lenses arranged in at least one direction of the transparent base, to effect a light focusing operation; and

a light absorbing layer having small opening portions at a light converging part of the micro-lenses;
wherein the transparent base member is constituted of a transparent body having uniaxial optical anisotropy, and having an optical axis parallel to one face of the transparent base.

21. (New) A rear projection type display apparatus according to Claim 11, wherein the transparent base is substantially made of one of: glass plate, triacetyl-cellulose film, polycarbonate film oriented uniaxially or alicyclic acrylic resin.

22. (New) A rear projection type display apparatus comprising:
a transmission type screen;
a light source;
plural optical switch elements for modulating light from the light source;
and,

a projecting lens for projecting the light modulated by the optical switch elements onto the transmission type screen,

wherein

the transmission type screen comprises a transparent base, and a micro-lens arrangement arranged on a face of the transparent base, into which the polarized light is injected;

the light modulated by the switching elements are polarized lights respectively; and

polarized states of the polarized lights are coincide with each other when projected onto the transmission type screen.

23. (New) A rear projection type display apparatus according to Claim 22, wherein the transmission type screen comprises a light absorbing layer having very small opening portions.

24. (New) A rear projection type display apparatus according to Claim 22, wherein ones of micro-lenses of the micro-lens arrangement have substantially a rod-like shape.

25. (New) A rear projection type display apparatus according to Claim 22, wherein polarized states of the polarized lights are substantially circular polarization, elliptic polarization or linear polarization when projected onto the transmission type screen.

26. (New) A rear projection type display apparatus comprising:
a projecting apparatus for projecting an optical image; and

a rear projection type screen on a rear face of which projected light from the projecting apparatus is incident, for displaying the projected light at a front face thereof,

wherein

the projecting apparatus comprises a single tube type projecting apparatus having a light source, two-dimensional optical switch elements for modulating light from the light source into an optical image in accordance with image information, and a projecting lens for enlarging and projecting the optical image after the modulation;

the projection type screen includes a transparent base, plural micro-objects arranged on one face of the transparent base to effect a light focusing operation, and a light absorbing layer having small opening portions substantially at light converging parts of the micro-objects;

the transparent base member is constituted of a transparent body which is substantially isotropic optically or a transparent body having uniaxial optical anisotropy, and a light flux collimating means provided on a projected light incident side of a light distribution control element; and

the two-dimensional optical switch elements are liquid crystal display elements for displaying objects by using polarization of light, and the directions of linear polarization transparent axis of analyzers of the liquid crystal display elements are coincide with each other.

27. (New) The rear projection type display apparatus according to
Claim 26, wherein a direction of the linear polarization transparent axis of
analyzers of the crystal display elements is parallel or vertical to a display
surface.

28. (New) The rear projection type display apparatus according to
Claim 26, wherein ones of the micro-objects have substantially a rod-like
shape, and are provided directly on a transparent base.